

OF THE STATE OF CALIFORNIA

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CALIFORNIA ASSOCIATION OF SANITATION AGENCIES COMMENTS ON THE ASSIGNED COMMISSIONER'S AMENDED SCOPING MEMO AND RULING

Dated: July 26, 2018

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CALIFORNIA ASSOCIATION OF SANITATION AGENCIES COMMENTS ON THE ASSIGNED COMMISSIONER'S AMENDED SCOPING MEMO AND RULING

The California Association of Sanitation Agencies (CASA) is pleased to submit these Comments on the Assigned Commissioner's Amended Scoping Memo and Ruling (the "Scoping Memo") in accordance with the Commission's Rules of Practice and Procedure. CASA is very grateful to the Commission for moving quickly to consider the recommendations made by the California Council on Science and Technology (CCST) and other issues that would help to accelerate pipeline biomethane development. Increasing the instate production and distribution of biomethane is critical to achieving California's Short-Lived Climate Pollutant reduction, air quality improvement, low carbon fuel production, and other policy goals by 2030. CASA conservatively estimates that at least 75% of food waste currently landfilled could be accepted for co-digestion using largely existing infrastructure at municipal wastewater treatment plants. A modest volumetric increase of food waste for co-digestion can double the biogas production. In order for co-digestion to be truly viable, cost-effective markets must be assured for the products of digestion: biosolids and biogas. As local Air Districts impose restrictive limits as required under the Clean Air Act on the use of biomethane, the option to inject directly into the pipeline is increasingly important. This proceeding is vitally important for this and

many other reasons.

For the state to achieve those policies, CASA offers the following comments on the Scoping Memo.

I. THE CALIFORNIA ASSOCIATION OF SANITATION AGENCIES

CASA is an association of local agencies, engaged in advancing the recycling of wastewater into usable water, as well as the generation and use of renewable energy, biosolids, and other valuable resources. Through these efforts we help create a clean and sustainable environment for Californians.

CASA is in full support of comments submitted by the Bioenergy Association of California and offers the following comments in response to the Scoping Memo.

II. CRITICAL STATE POLICIES CALL FOR ACCELERATED DEVELOPMENT OF PIPELINE BIOMETHANE

California has passed numerous policies requiring instate production and use of biomethane to meet the state's climate change, renewable energy, and public safety goals.

A. Policies to Increase Instate Production and Use

In 2012, California enacted several laws calling for the increased production and use of biomethane in the state, including AB 1900 (Gatto), AB 2196 (Chesbro), and SB 1122 (Rubio).¹ AB 1900 requires that:

"To meet the energy and transportation needs of the state, the commission shall adopt policies and programs that promote the in-state production and distribution of biomethane. The policies and programs shall facilitate the development of a variety of sources of in-state biomethane."²

SB 1122 includes a similar requirement:

"The commission shall encourage gas and electrical corporations to develop and offer programs and services to facilitate development of in-state biogas for a broad range of purposes."

¹ AB 1900 (Gatto), Statutes of 2012, Chapter 602; AB 2916 (Chesbro), Statutes of 2012, Chapter 605; SB 1122 (Rubio), Statutes of 2012, Chapter 612.

² Public Utilities Code § 399.24(a).

³ Public Utilities Code § 399.20(f)(2)(D).

B. Policies to Accelerate Pipeline Biomethane Projects

In 2016, California enacted SB 840 and AB 2313 to increase pipeline biomethane projects. AB 2313 requires the commission to consider options to increase instate biomethane production and use, including consideration of whether to allow recovery in rates of the costs of interconnection for pipeline biomethane projects.⁴ SB 840 explains why increasing pipeline biomethane is critical to meet the state's climate and renewable energy policies:

"For California to meet its goals for reducing emissions of greenhouse gases and short-lived climate pollutants, the state must reduce emissions from the natural gas sector and increase the production and distribution of renewable and low-carbon gas supplies . . . Biomethane provides a sustainable and clean alternative to natural gas. If 10 percent of California's natural gas use were to be replaced with biomethane use, emissions of greenhouse gases would be reduced by tens of millions of metric tons of carbon dioxide equivalent every year. Investing in biomethane would create cobenefits, including flexible generation of electricity from a renewable source that is available 24 hours a day, reduction of fossil fuel use, reduction of air and water pollution, and new jobs. Biomethane can also be used as transportation fuel . . . biomethane is one of the most promising alternative vehicle fuels because it generates the least net emissions of greenhouse gases. . . . vehicles running on biomethane generate significantly lower emissions of greenhouse gases than vehicles running on electricity or fossil fuel-derived hydrogen."⁵

C. Biomethane and Short-Lived Climate Pollutant Policies

In the past few years, California has adopted several laws and plans to reduce super pollutants, known as Short-Lived Climate Pollutants (SLCP's), which can be tens to thousands of times more damaging to the climate than carbon dioxide. In fact, the state's scoping plan depends on SLCP reductions to provide more than one-third of all greenhouse gas reductions needed to meet the state's 2030 climate goals.⁶ The state's SLCP reduction goals, in turn, rely heavily on increased production and use of biomethane. SB 1383 (Lara, 2016) explains the urgency of reducing SLCP emissions:

"Short-lived climate pollutants, such as black carbon, fluorinated gases, and methane, are powerful climate forcers that have a dramatic and detrimental effect on air quality, public health, and climate change. These pollutants create a warming influence on the climate that is many times more potent than that of carbon dioxide.

 5 Senate Bill 840 (Budget), Statutes of 2016, SEC. 10, §§ (b) – (i).

⁴ Public Utilities Code § 784.2.

⁶ California's 2017 Climate Change Scoping Plan, adopted November 2017, at page 28. Available at: https://arb.ca.gov/cc/scopingplan/scopingplan.htm.

Short-lived climate pollutants that are toxic air contaminants also are a significant environmental risk factor for premature death."

Given the urgency of reducing SLCP emissions, SB 1383 requires state agencies to "consider and, as appropriate, adopt policies and incentives to <u>significantly</u> increase the sustainable production and use of renewable gas, including biomethane and biogas." ⁸ (emphasis added) In addition to this general direction, SB 1383 focuses specifically on the Commission, requiring it to "consider additional policies to support the development and use in the state of renewable gas, including biomethane and biogas, that reduce short-lived climate pollutants in the state."

The state's SLCP Strategy calls for removing barriers to pipeline injection of biogas made from organic waste and for additional policies to accelerate instate biogas production and use to provide low carbon transportation fuels, renewable power and pipeline biogas.¹⁰ The state's Climate Change Scoping Plan also calls for using more biogas, "a valuable in-state resource made from waste products," and calls for state policies to increase biogas production and use to replace fossil fuels.¹¹

CASA has worked proactively with CalRecycle and CARB as they develop regulations to implement SB 1383 mandates, with the recognition that the wastewater sector is a key collaborating partner necessary to achieve them. CASA conservatively estimates that at least 75% of food waste currently landfilled could be accepted for co-digestion using largely existing infrastructure at wastewater treatment plants. A modest volumetric increase of food waste for co-digestion can double the biogas production. In order for co-digestion to be truly viable, cost effective markets must be assured for the products of digestion: biosolids and biogas. As local Air Districts impose restrictive limits as required under the Clean Air Act on the use of biomethane, the option to inject directly into the pipeline is increasingly important, as is the production of transportation fuel. This proceeding is vitally important for this and many other reasons.

⁷ SB 1383 (Lara), Statutes of 2016, Chapter 395, section 1(a).

⁸ Health and Safety Code 39730.8(c).

⁹ Health and Safety Code 39730.8(d).

¹⁰ Short-Lived Climate Pollutant Reduction Strategy, adopted March 2017, at page 3. Available at: https://www.arb.ca.gov/cc/shortlived/shortlived.htm.

¹¹ California's 2017 Climate Change Scoping Plan, adopted November 2017, at page ES11. Available at: https://arb.ca.gov/cc/scopingplan/scopingplan.htm.

CASA offers the following responses to specific questions posed in the Scoping Memo in light of these urgent policy and public safety issues.

III. RESPONSES TO SPECIFIC QUESTIONS POSED IN SCOPING MEMO

CASA offers the following responses to the issues and questions posed in the Scoping Memo.

1. Reducing the Heating Value Requirement

CASA strongly supports CCST's recommendation to reduce the heating value of pipeline biogas to as low as 970 BTU. Doing so can reduce individual project costs by \$1 million or more as it would in many cases reduce the need for secondary biomethane purification equipment, while providing high quality biomethane for pipeline injection.

2. Setting maximum siloxanes concentrations

CASA supports CCST's recommendation to conduct additional research to determine whether the current siloxanes standard is appropriate. That research should include an examination of current practices. Wastewater treatment plants have long sought to lower siloxane concentrations since they damage pumps, foul adsorptive media, and harm other equipment. Many wastewater treatment plants have effectively minimized these issues by lowering the siloxane concentrations before they can cause issues. Review of the work already undertaken within the wastewater sector should be a first step of any research.

3. Reduce verification requirements for siloxanes

CASA agrees with CCST's recommendation to reduce the monitoring and verification requirements for siloxanes from biogas sources other than landfill and wastewater treatment facilities.

4. Blending requirements in certain locations

CASA supports giving producers the flexibility to blend renewable-based natural gas with fossil-based natural gas as an acceptable method to assist renewable natural gas end-product meet pipeline specifications set by the California Public Utilities Commission.

Outside of California, this method is a commonly used and acceptable practice for

biomethane production facilities based at landfills and other sources of bio-derivedmethane. As noted earlier, the state must reduce emissions from the natural gas sector and increase the production and distribution of renewable and low-carbon gas supplies.

The allowance of blending not only helps assure that the state can maximize its production of renewable natural gas by including sources that may not be able to meet pipeline specifications otherwise, it would also help bring some sources of fossil-based natural gas (i.e., regions known to produce hot gas that the gas corporation is required to take into its system) into compliance with pipeline specifications. We therefore encourage the Commission to consider allowing blending as an option as it can be effectively used to ensure pipeline specifications are not only met but could potentially improve upon the gas product overall.

5. Laboratories that can test siloxanes adequately

The wastewater sector utilizes a number of laboratories to monitor siloxane concentrations in both raw and conditioned biogas. A partial list of laboratories utilizing EPA Method TO-15, Method 111, or others, include: ALS Global, Air Technology Labs, Atmospheric Analysis & Consulting, Environmental Analytical Service, Applied Filter Technology, Fremont Analytical. In addition, the Sanitation Districts of Los Angeles County have developed their own method (they have a key scientist on-staff who helped develop the ASTM method).

6. Should renewable methane be held to same standards as biomethane?

The Scoping Memo does not define the term "renewable methane." Since the question implies that it differs from biomethane, but provides no further detail, CASA defers on this question pending further clarification.

7. Is there need for additional research?

CASA strongly supports additional research and urges the Commission to allocate a higher percentage of the Natural Gas Public Interest Research Program to biomethane R&D. Both the SLCP Reduction Strategy and the Forest Carbon Plan provide long lists of R&D needs to remove barriers to pipeline biomethane. As the CCST study points out, additional research is needed on siloxanes. R&D is needed to continue to reduce costs and increase the benefits of pipeline biogas, including more efficient and cost-effective

cleanup technologies, better understanding of the costs and benefits of different end uses, and appropriate standards for additional sources of pipeline biogas (in addition to landfill, wastewater and dairy biogas, as adopted in D.14-01-034.).

8. Are state incentives aligned with policy goals?

With the exception of dairy biogas, most state incentives are not aligned with the state's SLCP and air quality goals. Despite the urgency of reducing SLCP emissions, only a small fraction of Cap & Trade revenues from the Greenhouse Gas Reduction Fund (GGRF) have gone to SLCP reduction, and mostly only in the dairy sector. The state's 2018-19 allocation of Cap & Trade revenues actually cut the allocation for waste diversion from \$40 to \$25 million, even though SB 1383 calls for a 75 percent diversion of organic waste away from landfills by 2025. In the forest and transportation sectors, the allocation of GGRF funding has been even less focused on SLCP reduction. Most of the Low Carbon Transportation funding has gone to electric vehicles that fail to cut SLCP emissions and have higher overall carbon intensity emissions than vehicles that run on biomethane.

At the Commission, the gas utilities' Cap and Trade allowance revenues have not been aligned with the state's climate goals. On the electricity side, the Commission has authorized using up to 15 percent of the utilities' allowance revenues for projects to reduce emissions from the electricity sector. The Commission should do the same with the gas utilities' allowance revenues to help fund projects to produce carbon negative biogas that cuts SLCP emissions.

Even the current incentive program adopted in D.15-06-029, to help fund pipeline biogas interconnection, is limited to only \$40 million total. Given how far behind the gas sector is in reducing its emissions – compared to the electricity sector – and the urgency of reducing SLCP emissions, the Commission should significantly increase this incentive program.

As noted above, it is critical that projects undertaken by the public wastewater sector must be cost-effective in order to be viable. Wastewater treatment plants primary responsibilities are to treat wastewater such that it can be recycled or otherwise safely returned to the environment, and similarly to treat, manage, and in most cases recycle biosolids safely to the environment. Receiving organic waste for co-digestion and energy

production are not the sector's core responsibilities, though as environmental stewards they fit generally into our overall plans and objectives. Since our budgets are driven by user fees, it is imperative that fees are assessed for our core functions and other objectives must be at least cost neutral. Therefore state subsidies are critical to enable co-digestion, energy/fuel production, and/or pipeline biomethane injection projects to be cost effective.

9. Should the existing incentive for pipeline biomethane interconnection be extended or revised?

Yes. As noted above, the current incentive for pipeline biomethane interconnection is very small compared to the urgency of reducing SLCP emissions and other state policies. It is also tiny compared to the many incentives offered on the electricity side for distributed solar, energy storage, smart meters, electric vehicles, and more. Increasing pipeline biomethane production is by far the lowest carbon and most beneficial way to reduce emissions from the natural gas sector. CASA urges the Commission to revise the pipeline biomethane interconnection incentive in the following ways:

- a. The \$40 million cap should be increased to \$400 million or should be removed altogether until the state has met the SLCP reduction requirements of SB 1383 and the requirements of the Forest Carbon Plan.
- b. The Commission should create a queue that allows project developers to secure funding during project development, rather than risking the possibility that the incentive funding (if there is a program cap) will be expended before their projects are online.
- c. The per-project incentive should cover 100 percent of interconnection costs, rather than 50 percent, up to a fixed amount per project.
- d. The utilities should be required to rate-base interconnection incentives.

10. Should there be a single, joint utility interconnection tariff for biomethane?

CASA believes that a single, joint utility tariff might be helpful if it focuses exclusively on pipeline extensions and the actual pipeline interconnection, but prohibits a gas corporation from rate-basing and installing equipment (i.e., gas cleanup equipment) on the customer side of the gas meter. Further, a utility interconnection tariff should not serve as a substitute to any state policy goals established by the legislature encouraging the construction of pipeline interconnections to stranded renewable natural gas

production facilities that currently do not have gas service to capture and produce renewable natural gas. In fact, the renewable natural gas industry is currently working on legislation right now – SB 1440 (Heuso) – with stakeholders representing renewable gas producers, gas corporations, dairies, landfill operators, municipalities and third-party marketers to establish a biomethane procurement requirement of 32 billion cubic feet. Within this piece of legislation, the bill clearly establishes principles to ensure a competitive market for vehicle fuels that does not give utilities an unfair advantage. Finally, a single, joint utility interconnection tariff between all gas corporations statewide would be helpful to minimize confusion assuming this could be done.

IV. ADDITIONAL ISSUES TO CONSIDER IN THIS PHASE OF THE PROCEEDING

In addition to the issues identified in the Scoping Memo, CASA urges the Commission to consider additional policies and incentives to promote pipeline biomethane production, as required by AB 1900 and SB 1383. As the SLCP Reduction Strategy states, "Practical solutions must be developed and implemented to overcome barriers to waste gas utilization for pipeline injection . . . These barriers are not insurmountable, and now is the time to solve them. State agencies, utilities, and other stakeholders need to work immediately to identify and resolve remaining obstacles to . . . injecting renewable natural gas into the pipeline, as called for in SB 1383."12

CASA urges the Commission to consider three additional areas in this phase of the proceeding: the need for a biomethane procurement requirement, the need to allocate some of the gas utilities' allowance revenues to biomethane production, and the need to reconsider the existing standards for additional constituents of concern.

A. Establish a Biomethane Procurement Requirement

The lack of market certainty is a major impediment to biomethane development in California. The gas sector needs a procurement policy like the RPS in the electricity sector, which has increased renewable power from 10 to 33 percent in just 16 years. As

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¹² Short-Lived Climate Pollutant Reduction Strategy, above, at pages 3-4.

the SLCP Reduction Strategy notes, building "market certainty and value for the energy .

. . will help to secure financing to accelerate and scale project development."

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The Legislature is currently considering SB 1440 (Hueso), which would establish a small biomethane procurement requirement (32 billion cubic feet by 2030). If SB 1440 is not enacted this year, CASA urges the Commission to adopt a biomethane procurement requirement that:

- 1. Allows the Utilities to rate base among their customers the cost of biomethane production, clean-up, and interconnection.
- Focuses on instate biomethane to meet the requirements of AB 1900, SB 1383, SB 840, and other state policies.
- 3. Includes all organic waste sectors and conversion technologies.
- 4. Prioritizes the lowest carbon sources of biomethane that reduce SLCP emissions and protect public health and safety.
- B. Allocate a Portion of Gas Utilities' Allowance Revenues to Biomethane Production As noted above, the Commission has allocated up to 15 percent of the electricity utilities' Cap & Trade allowance revenues to projects that reduce SLCP emissions from the electricity sector. CASA urges the Commission to adopt a parallel decision for the gas utilities' allowance revenues. This allocation is even more urgently needed in the gas sector which is far behind the electricity sector in reducing its SLCP emissions and moving to renewable sources. Allocating a portion of the gas utilities' allowance revenues would help to reduce SLCP emissions and provide important air quality improvements and other benefits.

C. Need to Reconsider Existing Standards for Additional Constituents of Concern

CASA urges the Commission to reconsider the existing standards for additional constituents of concern, including oxygen and hydrogen and perhaps other constituents. When SB 840 was enacted, the BTU and siloxanes requirements were the most obvious to reconsider, but more recent experience indicates that other standards may also be too restrictive and cause projects unnecessary expense and risk. CASA urges the Commission as part of the 5-year review required by AB 1900,¹⁴ to consider whether to

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¹³ Id. at page 4.

¹⁴ Health and Safety Code § 25421(e).

review other standards to ensure that they meet the goal of AB 1900 to increase pipeline biomethane production and distribution, as well as the goals of protecting public health and safety.

V. CONCLUSION

CASA appreciates the opportunity to comment on the Scoping Memo and the Commission's accelerated schedule to consider and adopt the recommendations from CCST.

DATED: July 26, 2018 Respectfully submitted,

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VERIFICATION

I am a representative of the California Association of Sanitation Agencies and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are therein stated on information or belief, and, as to those matters, I believe them to be true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 26th day of July, 2018 in Sacramento, CA

/s/ Gregory Kester

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